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REMARKS

Claims 1-11 are currently pending in the subject application and are presently under consideration. A version of all pending claims is found on pages 2-4. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

I. Rejection of Claims 1, 2 and 7 Under 35 U.S.C. §102(b)

Claims 1, 2 and 7 stand rejected under 35 U.S.C. §102(b) as being anticipated by Silva et al. (4,978,862). It is respectfully submitted that this rejection should be withdrawn for at least the following reason. Silva, et al. does not teach or disclose the present invention as recited in the subject claims.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

The present claimed invention relates generally to a system and method for detecting voids in an interlayer dielectric (ILD) layer. (p. 17, Abstract of the Invention, line 2). In particular, independent claim 1 recites a measuring system for measuring parameters of the ILD layer based on light reflected from the at least one portion of the ILD layer. Applicants' claimed invention clearly recites a novel system for detecting voids that may appear in an interlayer dielectric layer during processing through utilization of a measuring system that measures parameters of the interlayer dielectric layer based upon light reflected from the interlayer dielectric layer. The measuring system not only detects reflected and/or refracted light, but also measures the reflected and/or refracted light through the use of scatterometry or another suitable technique, and thereupon supplies data relating to the presence or absence of voids in the interlayer dielectric layer to a processor. See, page 9, lines 2-7. Silva et al., does not teach such a measuring system.

Silva et al., teaches a detector that may be a photomultiplier tube or a solid-state detector. See, col. 10, line 33-34. The detector simply detects whether or not light reflected from the test part is incident upon it, and if so, sends a signal to a computer which generates a map of the maximum scatter intensity versus position in the X and Y plane. See, Col. 10, lines 41-45. Nowhere in Silva et al. is it taught or suggested that the light detector perform any function other than the detection of light and the transmission of a signal to an attached computer for further processing. It is apparent then that the light detector as recited in Silva et al. does not measure parameters of the ILD layer based on light that is reflected from at least one portion of the ILD layer, but rather simply detects light that is incident upon it and sends signals to a computer.

Consequently, Silva et al., does not teach or suggest each and every element as recited in applicants' claimed invention. Accordingly, it is respectfully requested that the rejection of independent claim 1 and dependent claims 2 and 7 be withdrawn.

II. Rejection of Claim 6 Under 35 U.S.C. § 103(a)

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Silva et al. ('862) in view of Subramanian et al. (6,545,753). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons.

Pursuant to 35 U.S.C. §103(c), Subramanian et al. does not qualify as prior art against the subject application since the subject matter of Subramanian et al. and the claimed invention, at the time the invention was made, was subject to an obligation of assignment to Advanced Micro Devices, Inc. Thus, since Subramanian et al. does not qualify as prior art against the subject application, Subramanian et al. cannot make up those deficiencies inherent in Silva et al. with respect to independent claim 1, as discussed supra. Accordingly, this rejection of claim 6 (which depends from claim 1) should be withdrawn.

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III. Rejection of Claims 3 and 4 Under 35 U.S.C. § 103(a)

Claims 3 and 4 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Silva et al. ('862) in view of Kleinknecht et al. (4,330,213). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Claims 3 and 4 depend from independent claim 1 which is believed to be in condition for allowance, and Kleinknecht et al. does not make up for the aforementioned deficiencies presented by Silva et al., as discussed above. Accordingly, withdrawal of this rejection is respectfully requested.

IV. Rejection of Claim 5 Under 35 U.S.C. § 103(a)

Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Silva et al. ('862) in view of Kleinknecht et al. (4,330,213), and further in view of Subramanian et al. ('753). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Claim 5 depends from independent claim 1. Further, as stated above, Kleinknecht et al. does not overcome the aforementioned deficiencies of Silva et al., and Subramanian et al. does not qualify as prior art against the subject application. Consequently, withdrawal of this rejection is respectfully requested.

V. Rejection of Claims 8-11 Under 35 U.S.C. § 103(a)

Claims 8-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Silva et al. ('862) in view of Subramanian et al. ('753). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. As noted above, Subramanian et al. does not qualify as prior art against the subject application pursuant to 35 U.S.C. §103(c). Accordingly, withdrawal of this rejection is respectfully requested.

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CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 (Ref. No. AMDP595US).

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

AMIN & TUROCY, LLP

Himanshu S. Amin Reg. No. 40,894

AMIN & TUROCY, LLP 24TH Floor, National City Center 1900 E. 9TH Street Cleveland, Ohio 44114 Telephone (216) 696-8730 Facsimile (216) 696-8731